### DOCUMENT RESUME

SE 021 771 ED 133 195

TITLE Energy Education Materials Inventory (e.e.m.i.). Part

Four: Kits, Games & Miscellaneous Curricula. INSTITUTION Energy and Man's Environment Inc., Portland. Federal Energy Administration, Washington, D.C.

SPONS AGENCY PUB DATE Sep 76

CONTRACT CR-04-60565-00

25p.; For related documents, see SE 021 768-772; Not NOTE available in hard copy due to marginal legibility of

original document

MF-\$0.83 Plus Postage. HC Not Available from EDRS. EDRS PRICE DESCRIPTORS Audiovisual Aids: Elementary School Science:

\*Elementary Secondary Education; \*Energy; Games; \*Instructional Materials; Learning Modules; Reference

Materials: Science Education: Secondary School

Science: Social Studies: \*Teaching Guides

### ABSTRACT

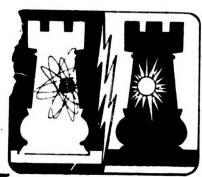
This publication is one of a six-part inventory of energy education materials. Included in this part is a listing of kits, games, and miscellaneous curricula. For each of the materials listed the following items are included when available: (1) Title: (2) Author; (3) Availability; (4) Cost; (5) Grade Level; (6) Related Materials; and (7) Evaluation of the material. Materials listed in this reference include both print and non-print items for teachers and students. (RH)

Documents acquired by ERIC include many informal unpublished \* materials not available from other sources. ERIC makes every effort \* \* to obtain the best copy available. Nevertheless, items of marginal \* reproducibility are often encountered and this affects the quality \* of the microfiche and hardcopy reproductions ERIC makes available \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \* responsible for the quality of the original document. Reproductions \* \* supplied by EDRS are the best that can be made from the original. \*



US DEPARTMENT OF HEALTH EDUCATION & WELFARE EDUCATION

THIS DOL MENT HAS BEEN MEETH I THE PERSON OR CHUAN ZAT UN (IN T. N. ATING IT POINTS OF EACH PIN (INS STATED DO NOT NECESSAN LY REPHE SENTOFFIC ALNAT ONAL INSTITUTE UP EDUCATION POST ON OH PELLY



## iv. kits, games & misc. curricula



# e.e.m.i.

a six-part
Energy Education Materials Inventory,
prepared for the
Federal Energy Administration
by
Energy & Man's Environment, Inc.:

- · John C. Jones, President
- · Ilene Wright, Proj. Co-ord.
- Noel McInnis, Proj. Co-ord.

September, 1976

part four: kits, games, & miscellaneous curricula

### **ACKNOWLEDGEMENTS**

The EEMI search for energy education materials depended on the active support and contributions of many individuals. The most deserving of recognition -- the hundreds that responded to EEMI mailings--must remain unnamed. Regular EEMI advisors, Maggi Rogers, Leslie Wycoff, Dr. Peet Soot and Ray Theiss, provided creative ideas, valuable insight and patience. Special consultant, Dr. Jon Wert, won enduring appreciation for his conscientious work and humor. Tim Crean and Ed Sawyer at the National Energy Information Center distinguished themselves by searching and re-searching computerized data banks. FEA's representative, Rene Vawter, nurtured us with wise counsel and enthusiasm. Her support made the EEMI Project an enjoyable challenge. My personal gratitude and that of the EEMI staff is extended to Dr. John Jones, President of Energy & Man's Environment. His determination, bouyancy and drive gave us all strength. The EME office and field staff endured the disruption and day-to-day crises of this short-term, intensive project with smiles. Mary Madden and Vicki Blair of Blackwell/North America coordinated data processing with insight and sensitivity to the task. Last in this list, but first in my thoughts and feelings, the EEMI staff--Cheryl Glazer, Larry Israel and Noel McInnis. They ultimately did the daily ration of work by maintaining their good spirits with Cheryl's herb teas, Larry's laughter and Noel's not-so-inferior puns. My thanks to all of you. It's been a pleasure.

> Ilene A. Wright EEMI Project Coordinator

COVER DESIGN AND GRAPHICS by Larry B. Israel

Prepared for the
Federal Energy Administration
by Energy & Man's Environment
0224 S.W. Hamilton
Portland, Oregon 97201
(503) 226-7131

September, 1976

Development of these booklets was supported by the Federal Energy Administration, Office of Marketing Education through Contract #CR 04-60565-00. However, no U.S. Government endorsement of the materials included in this Inventory should be inferred. All mistakes and inconsistencies are the sole responsibility of Energy & Man's Environment, Inc.

### PRELUDE

Every realm of life is shaped and molded by energy flow as most people learned rather abruptly during the winter of energy scarcity, 1973-74. Rising prices, unemployment, food shortages, detente, embargo, the politics of the Middle East, air pollution, brown-outs and 55 MPH signs continually remind us of our energy-dependent existence and the complex nature of our energy dilemma.

America's need for the skills and understanding necessary to resolve energy problems was met with a deluge of information, contradictory data, public hearings, impact statements, new laws and judicial decisions. Disagreements and only slight accord among THE experts added seasoning and anxiety. People wondered, "Is this fact?

Or is this opinion and interpretation?"

In the midst of this situation private and governmental agencies sought citizen contributions to policy and program formation. At the same time attitudes toward decision making changed from THE "right answer" to "Based on what we know today...."

During three years of grappling with energy-related issues

Americans relearned that information and its meaning change from day to day.

Americans began to recognize how little they knew, how much both they and THE experts have to learn, how rapidly information becomes obsolete, how quickly yesterday's considered decisions are labeled mistakes. As a result Americans sought the perspectives, knowledge and skills required to meet the challenges of living today.

Educators in every sector responded--no discipline was left untouched! Using current information, and diverse perspectives and opinions, educators began to teach the skills young people need to process and keep up with enduring, evolving controversies by using energy concerns as the basis for learning experiences.

The ENERGY EDUCATION MATERIALS INVENTORY is the most comprehensive, available list of resources for use by K-12 teachers and students in pursuit of understanding and effective action within the interdisciplinary energy dilemma.

Hopefully this INVENTORY will encourage even more productive energy education.

## CONTENTS

## Booklet iv: Kits, Games & Miscellaneous Curricula

Booklet	i:	Print Materials	1
Booklet	ii:	Non-Print Materials, Part 1	101
Booklet	iii	: Non-Print Materials, Part 2: 16 MM Films	175
Booklet	<u>iv</u> :	Kits, Games & Miscellaneous Curricula	
		Prelude	241
		Contents	242
		Commentary	243
		Abbreviations/Standardizations	244
		Kits/Packages	245
		Simulations/Games	250
		Multi-Media	255
		Programmed Instruction	258
		Other	260
Booklet	v:	Reference Sources	263
Booklet	vi:	Indexes	303

### COMMENTARY ON BOOKLETS I-IV

- WHAT WAS THE EEMI PROJECT? EEMI was designed to produce a thorough inventory of existing energy education materials and reference sources. It is intended that this systematic listing will provide educators with access to resources and will hasten the inclusion of energy-focused learning experiences in educational programs.
- HOW IS THE INVENTORY ORGANIZED? There are six parts: Print Materials;
  Non-Print Materials-Part 1; Non-Print Materials-Part 2: 16 MM Films;
  Kits, Games and Miscellaneous Curricula; Reference Sources; and
  Indexes.
- WHAT IS INSIDE? Citations are grouped into chapters by type of material (e.g., all 35 mm films are listed together). Within each chapter the citations are listed alphabetically by title.
- WHAT IS IN A CITATION? Each citation contains the information normally used by libraries and book-buyers to purchase materials. A typical entry in Booklet I-IV follows:
  - Title and sub-titles
  - Author's name and initials
  - 3. Imprint (city, publisher and year of publication)
  - 4. Cost (if known)
  - 5. (Grade) Level:
  - Accompanying materials, if any
  - 7. Tested: (yes or no;
     no entry = unknown)

1\*ENERGY LEARNING PACKET FOR
ENERGY CONSERVATION AWARENESS.

2COURREGES, E.M. 3JACKSONVILLE,
FL, DUVAL COUNTY SCH. BOARD,
1974. 4\$5.65

5LEVEL: 4-6
6STUDENT MATERIALS
TEACHER'S GUIDE

7TESTED: NO

- ARE THERE EXCEPTIONS? Yes! Liberty was taken with the traditional imprint information. The actual distributor of the material was recorded if different than the publisher. Late entries are listed in addenda at the end of Booklets I, II and III.
- AND FOR BOOKLETS V AND VI? Reference source entries are described at the beginning of Booklet V. The Indexes in Booklet VI cross-reference author's names and titles of materials to page numbers.
- WHAT ELSE DO I NEED TO USE THIS INVENTORY? Booklets I-IV use library-style, bibliographic citations that do not include complete addresses. Use Books-In-Print catalogues, telephone books and/or information and directories compiled by libraries and book-buyers to obtain complete addresses.
- WHO COMPILED THIS INVENTORY FOR FEA? Energy & Man's Environment, Inc.

  EME is a non-profit corporation serving America's educational communities. EME encourages and supports educators in their efforts to create an energy literate public.

### ABBREVIATIONS

	ADDICATATIONS	
ADMIN,ADMINISTRATION	ENCYENCYCLOPEDIA	PLPLACE
AMERAMERICAN	ENTPENTERPRISES	PUBL
ASSNASSOCIATION	ESTESTABLISHMENT	(PUB., PUBS.)PUBLISHER, PUBLISHING
ASSOCASSOCIATED	COVTGOVERNMENT	R&DRESEARCH &
A-VAUDIO-VISUAL	INCINCORPORATED	DEVELOPMENT
&AND	INDINDUSTRIAL,	RDROAD
вквоок	INDUSTRY	RRRAILROAD
BKSBOOKS	INSTINSTITUTE	RYRAILWAY
BLDGBUILDING	INSTRINSTRUCTIONAL	SCHSCHOOL
BLVDBOULEVARD	INTLINTERNATIONAL	SCISCIENCES
BROSBROTHERS	LABLAPORATORY	S.P.ISUPERINTENDENT OF PUBLIC
COCOMPANY	LTDLIMITED	
CO-OPCO-OPERATIVE	MAGMAGAZINE	INSTRUCTION
COMCOMMUNITY	MFGMANUFACTURING	SQSQUARE
	NATLNATIONAL	STSTREET
CORPCORPORATION	ORGORGANIZATION	THOS. (THM) THOMAS
CTCOURT	PRODPRODUCTION	TRTERRACE
CTRCENTER	PROG PROGRAM	TVTELEVISION
DEV DEVELOPMENT	PROJPROJECT	UNIVUNIVERSITY
EDEDUCATION (AL)	PRODUCT	VOCVOCATIONAL

AN ASKERISK (\*) IDENTIFIES THOSE ITEMS KNOWN TO INCLUDE AN ENERGY CONSERVATION PERSPECTIVE.

## STANDARDIZATIONS

ABC/TVAMERICAN BROADCASTING COMPANY TELEVISION
BBC/TVBRITISH BROADCASTING COMPANY TELEVISION
CBS/TVCOLUMBIA BROADCASTING SYSTEM TELEVISION
FEAFEDERAL ENERGY ADMINISTRATION
GM CORPGENERAL MOTORS CORPORATION
NASANATIONAL AERONAUTICS & SPACE ADMINISTRATION
NBC/TV or NBC ED. ENTPNATIONAL BROADCASTING COMPANY EDUCATIONAL ENTERPRISES
U.S. AECUNITED STATES ATOMIC ENERGY COMMISSION
U.S. ERDA-TICUNITED STATES ENERGY RESEARCH & DEVELOPMENT ASSOCIATION- TECHNICAL INFORMATION CENTER
U.S. GPOUNITED STATES GOVERNMENT PRINTING OFFICE

# kits · packages

KIT/PACKAGE
BATTERIES AT WORK. MFDIA
MATERIALS, INC.
BALTIMORE, MEDIA
MATERIALS, INC. \$9.95
LEVEL: 3-5
LIBRARY CARDS
WOPKBOOK
STUDENT MATERIAL
TEACHER'S GUIDE
CASSETTE AUDIC-TAPE

BATTERIES & BULBS: DISCOVERY
KITS. CHILDREN'S MUSEUM,
RESOURCE CTR. BOSTON,
CHILDREN'S MUSEUM,
RESOURCE CTP. \$3.00 PER
WEFK RENTAL FEE
LEVEL: ADAPTABLE FOR MOST
LEVELS
ACTIVITY-CENTERED OBJECTS
TEACHER'S GUIDE

246

COAL: LOAN EXHIBIT KIT.

CHILDREN'S MUSEUM,

RESOURCE CTE. POSTON,

CHILDREN'S MUSEUM,

RESOURCE CTE. \$3.00 PER

WEEK RENTAL FEE

LEVEL: K-12

ILLUSTRATIONS

TESTED: YES

TESTED: YES

\*CONSERVATION OF ENERGY.
KANIGHEP, H, ET AL. LOS
ANGELES, LOS ANGFLES CITY
SCHS., 1976.
LFVEL: 5-8
STUDY PRINTS, TASK CARDS,
DUPLICATING ACTIVITY,
SHEETS FOR SIUDENTS
STUDENT MATERIAL
DITTO MASTER
TEACHER'S GUIDE

PACIFIC POWER & LIGHT.
PORTLAND, OF, PACIFIC
POWER & LIGHT.

KIT/PACKAGE (CONT.)

ENERGY CHALLENGE. UNION

TOWNSHIP SCHOOLS SYSTEM.

UNION, NJ 07083, UNION

TOWNSHIP, 1975.

LEVEL: 10-12

WORK CAPDS

WORKBOOK

DITTO MASTER

TEACHER'S GUIDE

CASSETTE AUDIO-TAPE

FILM STRIP,

TESTED: YES

ENERGY-ENVIRONMENT
CURRICULUM MATERIALS.
BRENNAN, M., ED., ET AL.
FT. MYERS, FL, LFE COUNTY
SCHOOLS, 1976.
LEVEL: K-12
2 PART CARD ACTIVITY SET.
SET 1 - 270 STUDENT
ACTIVITIES K-12
FNRICHMENT MATERIAL
STUDENT MATERIAL
TEACHER'S GUIDE
TESTED: YES

ENERGY FILMSTRIP (NO TITLE YET: AVAILABLE NOVEMBER 1976) ALUMINUM ASSOC.

NEW YORK, ALUMINUM ASSN., 1976.

LEVEL: 7-12

TEACHEP'S GUIDE

FILM STRIP

ENERGY & MATTER. KRESS, S.,
ET AL. DANSVILLE, NY,
INSTRUCTOR PURL., 1975.
\$4.95
POSTER
FNRICHMENT MATERIAL
STUDENT MATERIAL
TEACHER'S GUIDE

ENERGY RESOURCES OF TEXAS:

UNIT I: ENERGY FROM START

TO FINISH. ANDERSON, J.E.

AUSTIN, BUREAU OF

ECONOMIC GEOLOGY, 1976.

\$3.00 PLUS \$.15 STATE

SALES TAX FOR RESIDENTS OF

TEXAS

LEVEL: 7-9

MAP

STUDENT WATERIAL

CURRICULUM GUIDE

TEACHER®S GUIDE

TESTED: YES

KIT/PACKAGE (CONT.)
ENERGY: TODAY AND TOMORROW.
DEPT. OF ED. SAN DIEGO,
SAN DIEGO COUNTY, 1975.
LEVEL: 4-12
BOARD GAME
PAMPHLET
CHART
ENRICHMENT MATERIAL
COLORING BOOK
DITTO MASTER
CURRICULUM GUIDE
TEACHER'S GUIDE
TRANSPARENCY
TESTED: YES

ENERGY & YOUR FUTURE
ENVIRONMENT. CHEVRON CO.
REDWOOD CITY, CA, VISUAL
MATERIALS, INC., 1973.
IEVEL: 5-6
DITTO MASTER
TEACHER'S GUIDE
TRANSPARENCY
FILM STRIP
TESTED: YES

ENVIRONMENTAL EDUCATION
CURRICULUM SERVICE.
MYSTIC, CT, NATURAL
SCIENCE FOR YOUTH
FOUNDATION, MONTHLY.
\$20.00 PER YEAR (10
ISSUES)
LEVFL: 4-6
POSTER
STUDENT MATERIAL
FIELD TRIP GUIDE
CURRICULUM GUIDE
TEACHER'S GUIDE

TESTED: YES

ENVIRONMENTAL HEALTH: ENERGY

& THE ENVIRONMENT. FODER,
J.T., ET AL. ROSEMEAD,
SO. CALIF. EDISON, 1973.

LEVEL: 10-12

STUDENT NATERIAL

TEACHER'S GUIDE

RECORD (DISC)

FILM STRIP

TESTED: YES

KIT/PACKAGE (CONT.)

ENVIRONMENTAL HEALTH: ENERGY

& THE ENVIRONMENT. SO.

CALIF. EDISON. SANTA

MONICA, BOSUSTOW, S.

PROD., 1974. \$39.00 (2

PARTS)

LEVEL: 7-12

FILM STRIP

TESTED: YES

ENVIRONMENTAL IMPROVEMENT.

U.S. JAYCEES. TULSA,

OK., U.S. JAYCEES.

ENRICHMENT MATERIAL

FUNDAMENTALS OF ELECTRICITY.
PACILIO, J. CHICAGO,
WEBER COSTELLO.
LEVEL: 4-6

GEARED FOR ACTION. MEDIA
MATERIALS, INC.
BALTIMORE, MEDIA
MATERIALS, INC. \$9.95
LEVEL: 3-5
LIBRARY CARDS
WORKBOOK
STUDENT NATERIAL
TEACHER'S GUIDE
CASSETTE AUDIO-TAPE

\*HERE'S YOUR SAVENERGY KIT FOR PROMOTING ENERGY CONSERVATION. U.S. DEPT. OF COMMERCE OFFICE OF ENERGY PROG. WASHINGTON, U.S. DEPT. OF COMMERCE OFFICE OF ENERGY PROG. STUDENT MATERIAL ENERGY ACTIVITY GUIDELINES

"HOW YOUR GAS METER WORKS"

AMER. GAS ASSN. ED. SVCS.

ARLINGTON, VA, AMER. GAS

ASSN. ED. SVCS., 1966.

LEVFL: 7-9

CHART

STUDENT MATERIAL

DITTO MASTER

TEACHFR'S GUIDE

TESTED: YES

HIT/PACKAGE (CONT.)
HYDROCARBON CIVILIZATION.
HESSLER, E. MINNEAPOLIS,
MINNESOIA ENVIRONMENTAL
SCI. FOUNDATION, INC.,
1975. \$5.50
IFVEL: 10-12
ENRICHMENT MATERIAL
STUDENT WATERIAL
CURRICULUM GUIDE
TEACHER'S GUIDE
TESTED: YES

RITE SAFETY CLINICS.

PACIFIC POWER & LIGHT.

PORTLAND, OR, PACIFIC

POWER & LIGHT.

248 LIGHT 9 SOUND ENERGY.

MILLIKEN PUBL. CO. ST.

LOUIS, MILLIKEN PUBL.

CO. \$7.95

LEVEL: 5-9

DITTO MASTER

TEACHER'S GUIDE

TRANSPARENCY

LIVING WITH LIGHT. BETTER
LIGHT BETTER SIGHT BUREAU.
NEW YORK, FLECTRIC ENERGY
ASSN.
LEVEL: 4-9
WORKBOOK
TFACHER'S GUIDE

MACHINES AT WORK. MEDIA
MATERIALS, INC.
BALTIMORE, MEDIA
MATERIALS, INC. \$9.95
LEVEL: 4-6
LIBRARY CARDS
WORKBOOK
STUDENT MATERIAL
TEACHER'S GUIDE
CASSETTE AUDIO-TAPE

MACHINES & WORK. MILLIKEN
PUBL. CO. ST. LOUIS,
MILLIKEN PUBL. CO. \$7.95
LEVEL: 5-9
DITTO MASTER
TEACHER'S GUIDE
TRANSPARENCY

KIT/PACKAGE (CONT.)

MAGNETISM & ELECTRICITY.

MILLIKEN PUBL. CO. ST.

LOUIS, MILLIKEN PUBL.

CO. \$7.95

LEVEL: 5-9

DITTO MASTER

TEACHER'S GUIDE

TRANSPARENCY

MAGNETS: DISCOVERY KIT.
CHILDREN'S MUSEUM,
RESCURCE CTR. BOSTON,
CHILDREN'S MUSEUM,
RESOURCE CTR. \$3.00 PER
WEEK RENTAL FEE
LEVEL: ADAPTABLE FOR MOST
LEVELS
ACTIVITY-CENTERED OBJECTS
TEACHER'S GUIDE
TESTED: YES

MAGNETS & ELECTRICITY.

BUTTS, M. DANSVILLE, NY,
INSTRUCTOR PUBL., 1974.
\$4.95

LEVEL: 1-6
TEACHER BACKGROUND MATERIAL
POSTER
ENRICHMENT MATERIAL
STUDENT MATERIAL
CURRICULUM GUIDE
TFACHER'S GUIDE

"NATURAL GAS ... SCIENCE
BEHIND YOUR BURNER" AMFP.
GAS ASSN. ED. SVCS.
ARLINGTON, VA, AMER. GAS
ASSN. ED. SVCS., 1965.
LEVEL: 6-9
MAP
CHAPT
WORKBOOK
STUDENT MATERIAL
TEACHER'S GUIDE
TESTED: YFS

OF DEMOCRACY, TRUTH AND COURAGE: STUDIES OF ENVIRONMENTAL ACTION.
TANNER, T. NEW YORK, NAT'L AUDUBON SOCIETY, 1976. \$24.95
LEVEL: 10-12
PHOTOS
STUDENT MATERIAL
DITTO MASTER
TEACHER'S GUIDE
TESTED: YES

### KITS, GAMES & MISC. CURRICULA

KIT/PACKAGE (CONT.)
OIL - LOAN EXHIBIT KIT.
CHILDREN'S MUSEUM,
RESOURCE CTR. BOSTON,
CHILDREN'S MUSEUM,
RESOURCE CTR. \$3.00 PER
WEEK RENTAL FEE
LEVEL: K-12
ILLUSTRATIONS
TESTED: YES

OUR ENERGY-BASED ECONOMY
1974. EDISON ELECTRIC
INST. NEW YORK, EDISON
ELECTRIC INST., 1974.
\$30.00
LEVEL: 6-8
DITTO MASTER
TEACHER'S GUIDE
RECORD (DISC)
FILM STRIP
TESTED: YES

\*PROJECT PHYSICS TEACHER
GUIDE 3; THE TRIUMPH OF
MECHANICS. HARVARD UNIV.
CAMBRIDGE, MA, HARVARD
UNIV., 1968. \$18.40
LEVEL: 10-12
TEXTBOOK
TEACHER®S GUIDE

\*RESOURCE RECOVERY EDUCATION
KIT. NATL. CTR. FOR
RESOURCE RECOVERY, INC.
RESTON, VA, NATL. ASSN.
OF SECONDARY SCH.
PRINIPALS, 1974. \$12.00
LEVEL: 7-12
CHART
TEACHER'S GUIDE

SCIENCE CURRICULUM
IMPROVEMENT STUDY.
REGENTS OF THE UNIV. OF
CALIFORNIA. CHICAGO,
RAND MCNALLY 8 CO.
LEVEL: K-6
ENRICHMENT NATERIAL
STUDENT NATERIAL
TEACHER'S GUIDE

"SCIENCE PRINCIPLES & GAS
APPLIANCES WITH
EXPERIMENTS" WEAVER, E.C.
ARLINGTON, VA, AMER. GAS
ASSN. ED. SVCS., 1969.
LEVEL: 7-12
ENRICHMENT MATERIAL
STUDENT MATERIAL
DITTO MASTER
TEACHER'S GUIDE
TRANSPARENCY
TESTED: YES

SIMPLE MACHINES. MEDIA
MATERIALS, INC.
BALTIMORE, MEDIA
MATERIALS, INC. \$9.95
LEVEL: 3-5
LIBRARY CARDS
WORKBOOK
STUDENT MATERIAL
TEACHER'S GUIDE
CASSETTE AUDIO-TAPE

WEATHER/ENERGY & MATTER:
PRACTICE IN SCIENCE
INVESTIGATIONS.
ROSENBERRY, M., ET AL.
DANSVILLE, NY, INSTRUCTOR
PUBL., 1976. \$4.95
LEVEL: 4-6
CHART
WORKBOOK
STUDENT MATERIAL
DITTO MASTER
TEACHER'S GUIDE

\*\*\*\*



SIMULATION/GAME
ATTITUDE: COMPUTER ORIENTED
EXERCISES ON ATTITUDES AND
U.S. GASOLINE CONSUMPTION
(DRAFT) COMPUTER
TECHNOLOGY PROG.
PORTLAND, NW REGIONAL FD.
LAB, 1975. \$15.00 (GUIDE ONLY)
LEVEL: 7-9
LEVEL: 10-12
STUDENT MATERIAL

PALANCE: A SIMULATION OF FOUR FAMILIES CAUGHT IN ECOLOGICAL DILEMMAS. YOUNT, D., ET AL. LAKESIDE, CA, INTERACT, 1970.

LFVEL: 10-12
TEACHER\*S GUIDE

TEACHER'S GUIDE COMPUTER PROG.

CONSUME: A COMPUTER ORIENTED
PROBLEM SOLVING UNIT
(DRAFT) COMPUTER
TECHNOLOGY PROG.
PORTLAND, OR, NW REGIONAL
ED. LAB, 1975. \$15.00
(GUIDE ONLY)
LEVEL: 7-9
LEVEL: 10-12
STUDENT MATERIAL
TEACHER'S GUIDE
COMPUTER PROGRAM
TESTED: NO

DAM: COMPUTEP IMPLEMENTED
WATER RESOURCE TEACHING
GAME. VIRGINIA
POLYTECHNIC INST. DEPT. OF
FISH & WILDLIFE SCI.
BLACKSBURG, VA, VIRGINIA
POLYTECHNIC INST. DEPT. OF
FISH & WILDLIFE SCI.
LEVEL: 10-12

DEATH RAY. WILCOX, J.
HUNTINGTON BEACH, CA.,
WILCOX, J., 1976. \$1.00
LEVEL: 7-12
STUDENT MATERIAL
TEACHER'S GUIDE

DISCOVERING ENERGY. GORSKI, L.J. SPRINGFIELD, MA, MILTON BRADLEY, 1974. LEVEL: 7-9

TESTED: YES

SIMULATION/GAME (CONT.)
DISPATCH: POWER DISPATCH
TRAINER. FINK, F.T., ET
AL. E. LANSING, MICHIGAN
STATE UNIV., 1975. \$2.50
LEVFL: 10-12

FARTH 2020: FACULTY INSTITUTE WORKBOOK. CONLEY, J.H., ED. SUNNYVALE, CA, NASAAMES RES. CTR., 1975. \$10.00 LEVFL: 7-12 CHART ENRICHMENT MATERIAL WORKBOOK STUDENT MATERIAL DITTO MASTER CURRICULUM GUIDE TEACHER'S GUIDE SLIDES CASSETTE AUDIO-TAPE TESTED: YES

ELECTRICAL ENERGY & THE
ENVIRONMENT. WATKINS, K.,
ET AL. CLEVELAND, GA,
PIONEER C.E.S.A., 1975.
LEVEL: 7-12
TEXTBOOK
STUDENT MATFRIAL
FIELD TRIP GUIDE
TEACHER'S GUIDE
TESTED: YES

AROUND THE HOME. SCHEET?,
R.B. NEW YORK, EDISON
ELECTRIC INST. ED. SVCS.,
1976. \$22.00
LEVEL: 4-6
POSTER
DITTO MASTER
CURRICULUM GUIDE
TEACHER'S GUIDE
CASSETTE AUDIO-TAPE
AUDIO-TAPE
FILM STRIP
TESTED: YES

SIMULATION/GAME (CONT.)

#ELECTRICITY & ME...& ENFRGY
CONSERVATION. EDISON
ELECTRIC INST. ED. SVCS.
NEW YORK, EDISON ELECTRIC
INST. ED. SVCS., 1976.
\$40.00
LEVEL: 6-9
STUDENT MATERIAL
DITTO MASTER
TEACHER'S GUIDE
CASSETTE AUDIO-TAPE
FILM STRIP

ENFRGY: A COMPUTER
SIMULATION OF THE U.S.
ENFRGY CRISIS (DPAFT)
COMPUTER TECHNOLOGY PROG.

252 PORTLAND, OR, NW REGIONAL
ED LAB, 1975. \$15.00
(GUIDES ONLY)
LEVEL: 7-9
LEVEL: 10-12
STUDENT MATERIAL
TEACHER'S GUIDE
COMPUTER PROGRAM

TESTED: YES

TESTED: NO

ENERGY: A MULTI-MFDIA
LEARNING UNIT. SCHOLASTIC
BK SVCS. ENGLEWOOD
CLIFFS, SCHOLASTIC BK
SVCS., 1974.
LEVEL: 4-6
CHART
TFACHER'S GUIDE
RECORD (DISC)
CASSETTE AUDIO-TAPE
TESTED: YES

ENFRGY CHOICES SIMULATION.

ATMAN, K.S., ET AL.

PITTSBURGH, CURRICULUM

INNOVATORS & IMPLEMENTORS,

INC., 1976. \$3.50

LEVEL: 10-12

STUDENT MATERIAL

CURRICULUM GUIDE

TFACHER'S GUIDE

SIMULATION/GAME (CONT.)

\*ENERGY CONSERVATION.

WATKINS, K, ET AL.

CLEVELAND, GA, PIONEFR

C.E.S.A., 1975.

LEVEL: 7-12

TEXTBOOK

STUDENT MATERIAL

FIELD TRIP GUIDE

TEACHER'S GUIDE

TESTED: YES

ENERGY CPISIS: ARE YOU
INVOLVED? YOUTH ED. INC.
NFW YORK, YOUTH ED.
INC.
LEVEL: K-8

ENERGY CRISIS GAMEBOARD.
SOMMERKAMP, P.
WASHINGTON, SCI.
TEACHER, JUNE, 1975.
\$18.00 PER YEAR
LEVEL: 7-9

ENERGY & FCOLOGY: ARE YOU INVOLVED? YOUTH ED. NFW YORK, LEARNING REALITIES. \$6.95
LEVEL: 7-12
PUZZLES
WORKBCOK
DITTO MASTEP

ENERGY-ENVIRONMENT GAME
1973. FDISON ELECTRIC
INST. NEW YORK, EDISON
ELECTRIC INST., 1973.
\$20.00
LEVEL: 7-12
CHART
STUDENT MATERIAL
DITTO MASTER
TEACHER'S GUIDE
RECORD (DISC)
FILM STRIP
TESTED: YES

ENERGY IN THE COMMUNITY.

GORSKI, L.J. SPRINGFIELD,

MA, NILTON BRADLEY,

1974.

LEVEL: 7-9

TESTED: YFS

ENERGY X. IDEAL SCHOOL
SUPPLY CC. OAK LAWN,
IL., IDEAL SCHOOL SUPPLY
CO., 1974. \$19.50
LEVEL: 7-12

SIMULATION/GAME (CONT.)
GLOBAL ENERGY SITUATION ON
EARTH (DRAFT) COMPUTER
TECHNOLOGY PROG.
PORTLAND, OR, NW REGIONAL
ED. LAB, 1973. \$15.00
(GUIDES ONLY)

LEVEL: 7-9
LEVEL: 10-12
STUDENT MATERIAL
TEACHER'S GUIDE
COMPUTER PROGRAM
TESTED: NO

TEACHER'S GUIDE

HANDBOOK FOR CITIZENS\*
WORKSHOPS ON ENERGY & THE
ENVIRONMENT. OAK RIDGE
ASSOC. UNIV. OAK RIDGE,
TN, U.S. AFC, 1973.
LEVEL: 10-12
WORKBOOK
CURRICULUM GUIDE

\*HOUSEHOLD ENERGY GAME., SMITH, T.W., ET AL.
MADISON, SEA GRANT
COLLEGE, UNIVERSITY OF
WISCONSIN, 1974.
LEVEL: 10-12
STUDENT MATERIAL

\*MASS TRANSIT. GORSKI, L.J. SPRINGFIELD, MA, MILTON BRADLEY, 1974. LEVEL: 7-9
TESTED: YES

NO DAM ACTION. KLIETSCH,
R.G. ST. PAUL, INSTR.
SIMULATIONS, INC., 1972.
\$125.00

LEVEL: 10-12

CHART

STUDENT MATERIAL

TEACHER'S GUIDE

TESTED: YES

NUCLEAR ENERGY GAME.

O'LEARY, A. HUNTINGTON,

NY, SIMULATION LEARNING

INST., INC. \$45.00

OIL EXPLORATION GAME. LES ED. EQUIPMENT PTY. LTD. VICTORIA, AUSTRALIA, LES ED. EQUIPMENT PTY. LTD. \$15.00
LEVEL: 7-12

SIMULATION/GAME (CONT.)

OUR U.S. ENFRGY FUTURE

(DRAFT) COMPUTER

TECHNOLOGY PROG.

PORTLAND, OR, NW REGIONAL

ED. LAB, 1975. \$15.00

(GUIDES ONLY)

LEVEL: 7-9

LEVEL: 10-12

STUDENT MATFRIAL

TEACHER'S GUIDE

COMPUTER PROGRAM

TESTED: NO

PEOPLE & TECHNOLOGY; UNIT II
& UNIT III TOOL KIT. ED.
DEV. CTR. CAMBRIDGE, MA,
ED. DEV. CTR., 1974.
\$89.49
LEVEL: 7-9
POSTER
PLAY
CHART

PLAY
CHART
ENRICHMENT MATERIAL
STUDENT MATERIAL
TEACHER'S GUIDE
SLIDES
RECORD (DISC)
AUDIO-TAPE
FILM STRIP
TESTED: YES

\*POWER PLAY: AN ENERGY
CRISIS BOARD GAME. YOUTH
ED., INC. NEW YORK,
YOUTH ED., INC.
ENRICHMENT MATERIAL

\*PUT OUT THE LIGHTS!
GORSKI, L.J. SPRINGFIELD,
NA, MILTON BRADLEY,
1974.

LEVEL: 7-9
TESTED: YES

\*SAVE A WATT GAME. CON EDISON. NEW YORK, CON EDISON.

SEARCH SIMULATIONS:

ECONOMIC; THE BATTLE OF

RIPPLE CREEK. STINE, J. &

R. NEW YORK, STINE, J. &

R., 1974. \$24.95

LEVEL: 7-12

SIMULATION/GAME (CONT.)
THE URBAN AGE: GEOGRAPHICAL
PERSPECTIVES FOR THE
SOCIAL STUDIES UNIT V:
"ENERGY AND THE
ENVIRONMENT" RITTER,
F.A., ET AL. NFW YORK,
MACMILLAN CO., 1977.
LFVEL: 7-12
TEXTBOOK
TEACHER'S GUIDE
TRANSPARENCY
TESTED: NO

URBAN ECONOMIC SIMULATION.
BAZAN, F.J. ET AL.
UNIVERSITY PARK, PENN.
ST. UNIV., 1976. \$5.00
254 STUDENT MATERIAL
TEACHER'S GUIDE
TESTED: YES

WHAT IS ALL THIS DAM
FOOLISHNESS. NATL.
COUNCIL FOR GEOGRAPHIC ED.
OAK PARK, IL, NATL.
COUNCIL FOR GEOGRAPHIC
ED., 1975. \$.50
LEVEL: 7-12

# multi-media

MULTI-MEDIA
CRITICAL ISSUES IN SCIENCE &
SOCIETY: THE GREAT ENERGY
DEBATE. SCIENCE &
MANKIND. WHITE PLAINS,
NY, SCIENCE & MANKIND.
\$104.50
LEVEL: 9-12
SLIDES

ELECTRIC ENERGY-UTILIZATION, GENERATION,
TRANSMISSION,
DISTRIBUTION,
CONSERVATION. PARADY.
ATHENS, GA, AMER. ASSN.
FOR VCC. INSTR.
MATERIALS, 1976.

256 LEVEL: 7-12
TEXTBOOK
SLIDES
CASSETTE VIDEO-TAPE
TESTED: YES

ELECTRIC SAFETY FROM "A" TO ZAP. ED. SERVICES PROG. JACKSON, MI, CONSUMERS POWER CO., 1973.

LFVEL: K-8
ENRICHMENT MATERIAL COMIC HOOK
COLORING BOOK
DITTO MASTER
RFCORD (DISC)
FILM STRIP
16 MM FILM

ENFRGY: A WORLD RESOURCES
KIT. YEROX FILMS.
MIDDLETCWN CT, XEROX
FILMS, 1974. \$39.95
LFVEL: 7-12
DITTO MASTER
STUDENT MATERIAL
TEACHER'S GUIDE
FILM STRIP

MULTI-MEDIA (CONT.) ENERGY, ECONOMICS, AND THE ENVIRONMENT. THOS. ALVA EDISON FOUNDATION, INC. SOUTHFIELD, MI, THOS. ALVA EDISON FOUNDATION INC., 1974-76. LEVEL: 1-12 POSTER PAMPHLET CHART ENRICHMENT WATERIAL DITTO MASTER CURRICULUM GUIDE TEACHER'S GUIDE TRANSPARENCY CASSFTTE AUDIO-TAPE REEL-TO-REEL AUDIO-TAPE AUDIO-TAPE REEL-TO-REEL VIDEO-TAPE 16 MM FILM

ENERGY & THE ENVIRONMENT:
COAL MINING IN APPALACHIA.
SCH. & SOCIFTY PROGRAMS.
CAMBRIDGE, MA, ED. DEV.
CTR., INC, 1976.
LEVEL: 9-12
POSTER
TEACHER'S GUIDE
FILM STRIP

EXPLORING YOUR ENVIRONMENTAL
CHOICES: AN INQUIRY AND
DECISION-MAKING APPROACH.
YOUTH ED., INC. NEW
YORK, METROPOLITAN LIFE,
1974.
LEVEL: 10-12
PAMPHLET
TEACHER'S GUIDE
TRANSPAPENCY
CASSETTE VIDEO-TAPE
TESTED: YES

\*FIRST IDEAS ABOUT ENERGY.
BEAN, N. PROD. SANTA
MONICA, BFA ED MFDIA,
1975. \$56.00-4 FILMSTRIPS
WITH PHONODISC
LEVEL: K
LEVEL: 1-3
TEACHER'S GUIDE
RECORD (DISC)
CASSETTE AUDIO-TAPE
AUDIO-TAPE
FILM STRIP
TESTED: YES

. .

MULTI-MEDIA (CONT.) GLOBAL EMERGENCY: ENERGY. GUIDANCE ASSOCIATES. NEW YORK, GUIDANCE ASSOCIATES, 1975. \$48.50 LEVEL: 7-12 TEACHER'S GUIDE FILM STRIP

HOW ELECTRIC MOTORS START S RUN. PARADY. ATHENS, GA. AMER. ASSN. FOR VOC. INSTR. MATERIALS, 1969. LF VEL: 7-12 TEXTBOOK SLIDES CASSETTE VIDEO-TAPE FILM STRIP

OIL SHALE MULTI-MEDIA KIT. AUGUSTIN, B., ET AL. CHICAGO, NATL. COUNCIL FOR GEOGRAPHIC ED., 1975. \$8.95 LEVEL: 4-12 PAMPHLET ENRICHMENT MATERIAL TEACHER'S GUIDE SAMPLES OF SHALE & OIL PRODUCED FROM SHALE TRANSPARENCY 35 WM FILM TESTED: NO

OUR ENERGY-BASED ECONOMY. WEST PENN POWER CO. HARRISBURG, PA, WEST PENN POWER CO., 1975. LEVEL: 7-9 POSTER PAMPHLET CHART STUDENT MATERIAL DITTO MASTER TEACHER'S GUIDE FILM STRIP TESTED: YES

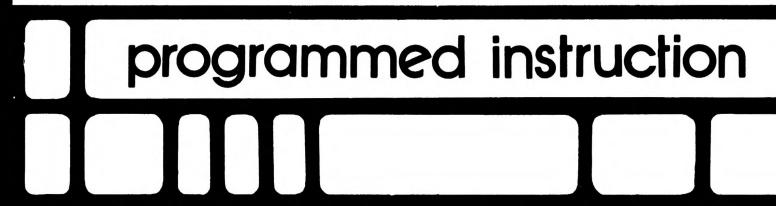
POWERFUL FRIEND, A. ED. SERVICES PROG. JACKSON, MI, CONSUMERS POWER CO. LEVEL: K-3 DITTO MASTER RECORD (DISC) FILM STRIP

MULTI-MEDIA (CONT.) PRIORITY ONE: ENVIRONMENT. POLLUTION CONTROL ED. CTR. UNION, NJ, POLLUTION CONTROL FD. CTR. LEVEL: 1-12 ENRICHMENT MATERIAL STUDENT MATERIAL TEACHFR'S GUIDE TRANSPARENCY CASSETTE AUDIO-TAPE FILM STRIP TESTED: YES

TECHNOLOGY AND THE UNITED STATES. MITSAKOS, C.L. ET AL. CHELNSFORD, NA, CHELMSFORD PUBLIC SCHS, 1973. \$4.00 LEVEL: 4-6

TEACHER'S GUIDE TESTED: YES

THE WORLD OF ENERGY. NAT'L. GEOG. SOCIETY. WASHINGTON, NAT'L. GEOG. SOCIETY, 1274. \$67.50 LEVEL: 7-12 TEACHER'S GUIDE RECORD (DISC) AUDIO-TAPE FILM STRIP



### KITS, GAVES & MISC. CURRICULA

PROGRAMMED INSTR.

"A" LEVEL PHYSICS: (SI

UNITS) CHAPPLE, MICHAEL.

LONDON, MACDONALD &

EVANS, 1974.

WORKBOOK

CONSUMER EDUCATION
PROGRAMMED LEARNING
INSTRUCTION IN USING
LEISURE TIME, ENERGY &
MONEY, UNIT VII. ALPHA
PHI CHAPTER. ST. PETER,
MN, DELTA PHI EPSILON
NATL. OFFICE, 1970. \$.50
WORKBOOK

ENERGY, ORGANIZATION & LIFE.
PANARES, R.R. CHICAGO,
ED. METHODS, 1967. \$3.75
LFVEL: 10-12
TEXTBOOK
STUDENT MATERIAL
TESTED: YES

INDIVIDUALIZED INSTRUCTION
IN SCIENCE: EARTH-SPACF
PROJECT. KUCZNA, R.M.
EASTCHESTER, NY,
EASTCHESTER PUBLIC SCH.,
1972. \$3.32
LEVEL: 10-12
WORKBOOK
STUDENT WATERIAL

MAN & ENVIRONMENT: A
CHANGING RELATIONSHIP.
CARNEY, A.P., ED.
CHICAGO, DENOYERGEPPERT, 1973. \$245.00
LEVEL: K-3
CHART
STUDENT MATERIAL
DITTO MASTER
TEACHER'S GUIDE
RECORD (DISC)
TESTED: YES

SOLAR HEATING PAPERS.
SAUNDERS, N.B. WESTON,
MA, SAUNDERS, N.B.
LEVEL: 10-12
STUDENT MATERIAL

PROGRAMMED INSTR. (CONT.)

THE GREEN BOX: HUMANISTIC
ENVIRONMENTAL EDUCATION.
RICH, B. EUREKÀ, CA,
HUMBOLDT COUNTY SCHOOLS
OFFICE OF ENVIRONMENTAL
ED., 1975. \$35.00
STUDENT MATERIAL
TESTED: YES



EXPERIMENTS

FUNDAMENTALS OF ATOMIC

ENERGY. ED. TEACHING AIDS

DIV. CHICACO, DAIGGER,

A., & CO. \$12.50

FUNDAMENTALS OF ELECTRICITY.
ED. TEACHING AIDS DIV.
CHICAGO, DAIGGER, A., &
CO. \$15.00

FUNDAMENTALS OF JET
PROPULSION. ED. TEACHING
AIDS DIV. CHICAGO,
DAIGGER, A., & CO. \$10.50

JUNIOR SCIENCE KITS: MAKING WORK EASIER; ELECTRICITY; USING MAGNETS (3 OF 5) ED. TEACHING AIDS DIV. CHICAGO, DAIGGER, A., & CO. \$31.35 ENRICHMENT MATERIAL

VACHINES & ENERGY: LAB II.
ED. TEACHING AIDS DIV.
CHICAGO, DAIGGER, A., &
CO. \$65.00

MAGNETISM & ELECTROMAGNETISM. ED. TEACHING AIDS DIV. CHICAGO, DAIGGER, A., & CO. \$18.50

SOURCES OF ENERGY: LAB III.

ED. TEACHING AIDS DIV.

CHICAGO, DAIGGER, A., &

CO. \$56.00

FLECTRONIC SIMULATOR
ENERGY - ENVIRONMENT
SIMULATOR: MODELS: A230,
A240 & A209. TENNTRONICS,
INC. CUSTOM DESIGN & MFG.
CLARKSVILLE, TN,
TENNTRONICS, INC. CUSTOM
DESIGN & MFG. \$1995. \$6100.

EARS ENERGY CATALOG.

ENVIRONMENTAL ACTION
REPRINT SVCS. DENVER,
ENVIRONMENTAL ACTION
REPRINT SVCS. FREE IF
REQUESTED ON SCHOOL
STATIONERY \$.50 OTHERWISE
LEVEL: K-12
CATALOG OF ENERGY-RELATED
BOOKS, PAMPHLETS, PLANS,
GRAPHICS, ET
TESTED: NO

CAPDBOARD CUT-OUIS
ELECTRICITY SERVES OUR
COMMUNITY 1974. EDISON
ELECTRIC INST. NEW YORK,
EDISON ELECTRIC INST.,
1974. \$3.00
LEVEL: 4-6
STUDENT MATERIAL
TEACHER'S GUIDE
BULLETIN BOARD DISPLAY
TESTED: NO